

REMARKS

The Examiner rejected claims 17-20 under 35 U.S.C. §112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The Examiner rejected claims 17-20 under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the written description requirement.

The Examiner rejected claims 1-4, 8 and 17-20, under 35 U.S.C. §102(b) as allegedly being anticipated by Cancini, of record.

The Examiner rejected claims 1-8 and 17-20 under 35 U.S.C. §103(a) as allegedly being unpatentable over Cancini in view of Russ '750.

Applicants respectfully traverse the §112, §102(b) and §103(a) rejections with the following arguments.

35 U.S.C. §112, Second Paragraph

The Examiner rejected claims 17-20 under 35 U.S.C. §112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

More specifically, regarding claim 17, the Examiner alleges that "a second layer of opposite conductivity to the first layer and over the first layer is in direct physical contact with the substrate through the opening" is "vague and indefinite or at worst new matter" (page 2 of the final Office Action, mailed on September 13, 2005). In response, Applicants have amended claim 17. As a result, the second layer of claim 17 is supported by a second layer 130 of FIG. 2D, wherein the second layer 130 is in direct physical contact with the substrate layer 110 through the opening 122 of the first layer 120.

Based on the preceding arguments, Applicants respectfully maintain that claim 17 is not indefinite under 35 U.S.C. §112, second paragraph, and that claim 17 is in condition for allowance. Since claims 18-20 depend from claim 17, Applicants contend that claims 18-20 are likewise in condition for allowance.

35 U.S.C. §112, First Paragraph

The Examiner rejected claims 17-20 under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the written description requirement. In response, Applicants have amended claim 17. As a result, the second layer of claim 17 is supported by a second layer 130 of FIG. 2D, wherein the second layer 130 is in direct physical contact with the substrate layer 110 through the opening 122 of the first layer 120.

Based on the preceding arguments, Applicants respectfully maintain that claim 17 is not failed to comply with the written description requirement under 35 U.S.C. §112, first paragraph, and that claim 17 is in condition for allowance. Since claims 18-20 depend from claim 17, Applicants contend that claims 18-20 are likewise in condition for allowance.

35 U.S.C. §102(b)

The Examiner rejected claims 1-4, 8 and 17-20, under 35 U.S.C. §102(b) as allegedly being anticipated by Canclini, of record.

Applicants respectfully contend that Canclini does not anticipate claim 1, because Canclini does not teach each and every feature of claim 1. For example, Canclini does not teach “**a first layer having an opening, ... the first layer consisting of only one piece of continuously distributed semiconductor material**” of claim 1 (bold emphasis added).

Applicants would like to note that, in page 3 of the first Office Action, mailed on April 04, 2005, the Examiner argued that regions 1 and 6 of FIG. 7B of Canclini teach “**a first layer having an opening**” of claim 1 (bold emphasis added). In the response to this first Office Action filed on June 29, 2005, Applicants argued that “**the first layer of claim 1 is one piece** (FIG. 1A of the application), whereas the regions 1 and 6 of FIG. 7B in Canclini are two separate regions”. In response, in page 3 of the final Office Action, the Examiner stated that the argument of Applicants is “not convincing as there is no such language as “one piece” in the claims”. In response, Applicants have amended claim 1. As a result, in claim 1, the first layer consists of “**only one piece of continuously distributed semiconductor material**”. In contrast, the regions 1 and 6 of FIG. 7B of Canclini, which are independently formed (column 3, lines 54-63), are **two** separate regions (bold emphasis added).

Applicants would like to note that the first layer of claim 1 is supported by the description of the region 120 of FIGs. 1C and 2D.

Based on the preceding arguments, Applicants respectfully maintain that Canclini does not anticipate claim 1, and that claim 1 is in condition for allowance. Since claims 2-4 depend from claim 1, Applicants contend that claims 2-4 are likewise in condition for allowance.

In the final Office Action, the Examiner again rejected claims 7 and 8, under 35 U.S.C. §102(b) as allegedly being anticipated by Canclini, of record. Since claims 7 and 8 depend from claim 1, which is not anticipated by Canclini as argued above, Applicants contend that claims 7 and 8 are likewise in condition for allowance.

In the final Office Action, the Examiner again rejected claim 17, under 35 U.S.C. §102(b) as allegedly being anticipated by Canclini, of record.

Applicants respectfully contend that Canclini does not anticipate claim 17, because Canclini does not teach each and every feature of claim 17. For example, Canclini does not teach “**a first layer having an opening, ... the first layer consisting of only one piece of continuously distributed semiconductor material**” of claim 17 (bold emphasis added).

Applicants would like to note that, in page 3 of the first Office Action, the Examiner argued that regions 1 and 6 of FIG. 7B of Canclini teach “**a first layer having an opening**” of claim 17 (bold emphasis added). In the response to this first Office Action, Applicants argued that “**the first layer of claim 17 is one piece (FIG. 2D of the application), whereas the regions 1 and 6 of FIG. 7B in Canclini are two separate regions**”. In response, in page 3 of the final Office Action, the Examiner stated that the argument of Applicants is “not convincing as there is no such language as “one piece” in the claims”. In response, Applicants have amended claim 17. As a result, in claim 17, the first layer consists of “**only one piece of continuously distributed**

semiconductor material". In contrast, the regions 1 and 6 of FIG. 7B of Canclini, which are independently formed (column 3, lines 54-63), are **two separate regions** (bold emphasis added).

Applicants would like to note that the first layer of claim 17 is supported by the description of the region 120 of FIGs. 1C and 2D.

Based on the preceding arguments, Applicants respectfully maintain that Canclini does not anticipate claim 17, and that claim 17 is in condition for allowance. Since claims 18-20 depend from claim 17, Applicants contend that claims 18-20 are likewise in condition for allowance.

35 U.S.C. §103(a)

In page 4 of the final Office Action, the Examiner rejected claims 1-8 and 17-20 under 35 U.S.C. §103(a) as allegedly being unpatentable over Canclini in view of Russ '750.

Regarding claims 1-8, Applicants respectfully contend that claim 1 is not unpatentable over Canclini in view of Russ, because Canclini in view of Russ does not teach or suggest each and every feature of claim 1. For example, Canclini in view of Russ does not teach or suggest the feature "**a first layer having an opening, ... the first layer consisting of only one piece of continuously distributed semiconductor material**" of claim 1 (**bold emphasis added**). More specifically, Canclini does not teach the feature "**the first layer consisting of only one piece of continuously distributed semiconductor material**" of claim 1 as argued in the 35 U.S.C. §102(b) above. In addition, there is no mentioning of any layer in Russ that has an opening and consists of only one piece of continuously distributed semiconductor material.

Based on the preceding arguments, Applicants respectfully maintain that claim 1 is not unpatentable over Canclini in view of Russ, and that claim 1 is in condition for allowance. Since claims 2-8 depend from claim 1, Applicants contend that claims 2-8 are likewise in condition for allowance.

Regarding claims 17-20, Applicants respectfully contend that claim 17 is not unpatentable over Canclini in view of Russ, because Canclini in view of Russ does not teach or suggest each and every feature of claim 17. For example, Canclini in view of Russ does not teach or suggest the feature "**a first layer having an opening, ... the first layer consisting of only one piece of continuously distributed semiconductor material**" of claim 17 (**bold emphasis added**). More specifically, Canclini does not teach the feature "**the first layer consisting of only**

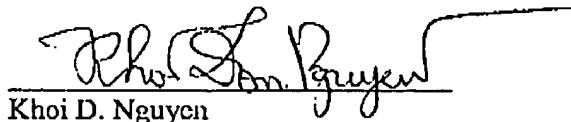
one piece of continuously distributed semiconductor material” of claim 17 as argued in the 35 U.S.C. §102(b) above. In addition, there is no mentioning of any layer in Russ that has an opening and consists of only one piece of continuously distributed semiconductor material,

Based on the preceding arguments, Applicants respectfully maintain that claim 17 is not unpatentable over Canclini in view of Russ, and that claim 17 is in condition for allowance. Since claims 18-20 depend from claim 17, Applicants contend that claims 18-20 are likewise in condition for allowance.

CONCLUSION

Based on the preceding arguments, Applicants respectfully believe that all pending claims and the entire application meet the acceptance criteria for allowance and therefore request favorable action. If the Examiner believes that anything further would be helpful to place the application in better condition for allowance, Applicants invites the Examiner to contact Applicants' representative at the telephone number listed below. The Director is hereby authorized to charge and/or credit Deposit Account No. 09-0456.

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